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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,145	04/20/2001	Christian John Cook	14684.47	9802

22913 7590 07/16/2003

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EXAMINER	
SUN, XIUQIN	
ART UNIT	PAPER NUMBER
2863	

DATE MAILED: 07/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N .	Applicant(s)	
	09/830,145	COOK, CHRISTIAN JOHN	
	Examiner	Art Unit	
	Xiuqin Sun	2863	

-- The MAILING DATE of this communicati n appears on the cover sheet with the correspondence address --

Peri d for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 May 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *39-67 and 89-94* is/are pending in the application.

4a) Of the above claim(s) *1-38 and 68-88* is/are withdrawn from consideration.

5)☒ Claim(s) *40* is/are allowed.

6)☒ Claim(s) *39,41-45,50,51,54-57,63,65,66,89-92 and 94* is/are rejected.

7)☒ Claim(s) *46-49,52,53,58-62,64,67 and 93* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *20 April 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Pri rity under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

Response to Amendment

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Election/Restrictions

2. Applicant's election without traverse of inventions III (claims 39-67 along with generic claims 89-94) in Paper No. 8 is acknowledged.

Claims 1-38 and 68-88 stand withdrawn in view of the election without traverse of paper No. 8.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 39, 42-45, 50, 51, 54, 55, 57, 63, 65 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tong et al. (U.S. Pat. No. 5595444) in view of Jones et al. (U.S. Pat. No. 5458418) and ~~Tremblay et al.~~ Hofmann (U.S. Pat. No. ~~6432399~~ 5682149).

Tong et al. teach a method and system for providing an indication of at least one of meat quality, pH levels, and stress levels in an animal to be slaughtered (col. 2, lines

32-48; col. 12, lines 44-62; col. 10, lines 4-9; col. 15, lines 19-27; col. 6, lines 34-44 and col. 15, lines 1-12), comprising: a) obtaining measurements corresponding to a body temperature of the animal (col. 2, lines 32-48; col. 5, lines 47-67; col. 6, lines 1-8 and col. 8, lines 3-49); b) applying an algorithm to the measurements obtained from a), which algorithm takes account of variations in the body temperature (col. 2, lines 32-48; col. 3, lines 45-65); and c) comparing the results of the algorithm to a predetermined threshold (col. 2, lines 32-48; col. 6, lines 45-67). Tong et al. further teach a microprocessor having input means for receiving the measurement from the measurement device, the microprocessor operable to implement an algorithm to the measurement for analyzing the measured data (col. 6, lines 34-44; col. 8, lines 3-49; col. 11, lines 57-67 and col. 12, lines 1-25). Tong et al. further teach that: said measurements are taken for a predetermined time period (col. 7, lines 53-67 and col. 8, lines 1-2); said algorithm is applied at an end of the predetermined time period (col. 7, lines 1-22); said measurements are taken on the outer part of the animal's body (abstract, col. 5, lines 47-67; col. 11, lines 57-67 and col. 12, lines 1-25); said microprocessor is a provided by way of a remote computer, wherein the microprocessor is operable to compare the output of the algorithm to a predetermined threshold, including an indication to indicate where the output of the algorithm has exceeded the predetermined threshold (col. 6, lines 45-67; col. 11, lines 57-67; col. 12, lines 1-25; col. 13, lines 14-67 and col. 14, lines 1-17).

Tong et al. do not teach: a) obtaining time varying measurements corresponding to a body temperature of the animal at periodic sampling intervals; b) said algorithm

cumulatively takes account of temporal variations in body temperature. Tong et al. also do not mention that: the temperature measurement device is a body mountable measurement device; comparing the results of the algorithm to a predetermined threshold and further, in the event of the threshold being exceeded, providing an indication of the threshold being exceeded; setting the animal aside for a predetermined animal withholding period in the event of the threshold being exceeded; skin temperature measurements are taken and compensation is provided for at least ambient temperature or solar radiation; the measurements are conducted over a period of between 3-36 hours; said predetermined time period is at least 12 hours and extends up to 24 hours.

Tong et al. teach that the measurement should be conducted over a certain predetermined time period. It would have been obvious to one having ordinary skill in the art at the time the invention was made optimize range of the time period in order to obtain the best results from the data analysis (Tong et al., col. 6, lines 14-21), since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

Jones et al. disclose a method for detecting poor meat quality in live animals, and teach the steps of: obtaining time dependent measurements corresponding to a body temperature of the animal at periodic sampling intervals (col. 3, lines 26-44 and col. 7, lines 27-43); and a data analysis algorithm cumulatively takes account of temporal variations in body temperature (Figs. 7-12; col. 1, lines 56-67 and col. 7, lines 27-43). Jones et al. further teach: comparing the results of the algorithm to a predetermined

threshold and further, in the event of the threshold being exceeded, providing an indication of the threshold being exceeded; setting the animal aside for a predetermined animal withholding period in the event of the threshold being exceeded (col. 4, lines 13-26); and skin temperature measurements are taken and compensation is provided for at least ambient temperature or solar radiation (col. 3, lines 26-41).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Jones relationship of stress levels with animal body temperature in the Tong system in order to determine meat quality in living animals by analyzing variations of living animal's body temperature (Jones et al., col. 1, lines 56-67).

Hofman teaches a body mountable measurement device for measuring body temperature of living animals (col. 1, lines 23-67 and col. 2, lines 1-5).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Hofman in the Tong system in order to measure variations of the animal's body temperature over time (Hofman, col. 1, lines 66-67 and col. 2, lines 1-5).

5. Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tong et al. in view of Jones et al. and ~~Tremblay et~~ Hofman al.

Tong et al., Jones et al. and Tremblay et al. teach the method that includes the subject matter discussed above. The combination of Tong et al., Jones et al. and Tremblay et al. does not mention: ten or more measurements corresponding to body temperature are taken.

In view of the teaching of Tong, Jones and ~~Tremblay~~ Hofman, one having ordinary skill in the art at the time the invention was made would be able to apply the same technique to carry out the method for measuring the body temperature of living animals as many times as he or she wants. The mere application of a known method to multiple instances by those skilled in the art would have been obvious.

6. Claims 56, 89-92 and 94 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tong et al. in view of Jones et al. and ~~Tremblay et al.~~ Hofman, and further in view of Wallace et al. (U.S. Pat. No. 4865044).

Tong et al., Jones et al. and Tremblay et al. teach the method that includes the subject matter discussed above. The combination of Tong et al., Jones et al. and Tremblay et al. does not mention: temperature measurements are taken in the ear canal of the animal; a ear tag having an attachment portion to extend through a body part of an animal, the tag incorporating an indicator; one or more animal temperature sensors disposed on/in the attachment portion for contact with the animal during use; an ambient temperature sensor is also provided on the tag; comparison means is provided for comparing the ambient temperature with the animal temperature; and the tag comprises a one piece molded body.

Wallace et al. teach a temperature sensing system and method for cattle, in which temperature measurements are taken in the ear canal of the animal (col. 2, lines 35-46; col. 3, lines 5-17). Wallace et al. also teach: a ear tag having an attachment portion to extend through a body part of an animal, the tag incorporating an indicator; one or more animal temperature sensors disposed on/in the attachment portion for

contact with the animal during use; an ambient temperature sensor is also provided on the tag; comparison means is provided for comparing the ambient temperature with the animal temperature; and the tag comprises a one piece molded body (col. 4, lines 54-67; col. 5, lines 1-2; col. 5, lines 16-35; col. 6, lines 65-67 and col. 7, lines 1-46).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teachings of Wallace et al. temperature measurement technique in the combination of Tong, Jones and Tremblay in order to provide a economical, workable and accurate method to measure the body temperature of living animals (Wallace et al., col. 2, lines 14-34).

Allowable Subject Matter

7. Claim 40 is allowed.

8. Claims 46-49, 52, 53, 58-62, 64, 67 and 93 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Reasons for Allowance

9. The following is an examiner's statement of reasons for allowance:

The primary reason for the allowance of claim 40 is the inclusion of the method step of correlating the results of the algorithm with at least one of a meat tenderness, a pH, and a stress standard. It is this step found in the claim, as it is claimed in the

combination, that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

The primary reason for the allowance of claims 46 and 58 is the inclusion of the step and means of adding all variances to obtain the cumulative temperature variance score. It is this step found in the claim, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

The primary reason for the allowance of claims 47-49, 52, 53 and 59 is the inclusion of the limitation that the algorithm is applied progressively. It is this limitation found in each of the claims, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

The primary reason for the allowance of claims 60-62 is the inclusion of the limitation that the system is embodied in an all-in-one indicator device. It is this limitation found in each of the claims, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

The primary reason for the allowance of claim 64 is the inclusion of the limitation that the processor is adapted to output a numeric value from a comparison with a meat tenderness scale. It is this limitation found in the claim, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes the claim allowable over the prior art.

The primary reason for the allowance of claim 67 is the inclusion of the limitation that the indicator is also operable to provide an indication that the system is functioning. It is this limitation found in the claim, as it is claimed in the combination, that has not been found, taught or suggested by the prior art of record which makes the claim allowable over the prior art.

The primary reason for the allowance of claim 93 is the inclusion of the limitation that an indicator is disposed on the tag, the indicator being responsive to the comparison means. It is this step found in the claim, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes the claim allowable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

10. Applicant's arguments filed 05/30/03 with respect to claims 39, 42-45, 54, 57, 63, 65 and 66 have been considered but are moot in view of the new ground(s) of rejection.

Claims 39, 41-45, 50, 51, 54, 55, 57, 63, 65, 66, 89-92 and 94 are rejected as new art (Jones et al., U.S. Pat. No. 5458418 and Wallace et al., U.S. Pat. No. 4865044) has been found to teach the limitations that are not taught explicitly by Tong et al. and Tremblay et al. For detailed response, please refer to sections 2-4 set forth above in this

office action.

Prior Art Citations

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

1) Tremblay et al. (U.S. Pat. No. 6432399) disclose a method for analyzing the dependence of stress on body temperature in mammals.

Contact Information

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiuqin Sun whose telephone number is (703)305-3467. The examiner can normally be reached on 7:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (703)308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are (703)872-9318 for regular communications and (703)872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

XS

July 10, 2003

John Barlow
Supervisory Patent Examiner
Technology Center 2800